Complete Summary

GUIDELINE TITLE

American Gastroenterological Association medical position statement: diagnosis and care of patients with anal fissure.

BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: Diagnosis and care of patients with anal fissure. Gastroenterology 2003 Jan;124(1):233-4. [1 reference] PubMed

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute/chronic anal fissures

GUIDELINE CATEGORY

Diagnosis
Management
Treatment

CLINICAL SPECIALTY

Colon and Rectal Surgery
Family Practice
Gastroenterology
Internal Medicine

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide a rational basis for the diagnosis and treatment of patients with anal fissures

TARGET POPULATION

Adult patients with anal fissures

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Medical history
2. Physical examination, including examination under anesthesia as warranted

Treatment

1. Conservative care, including fiber supplements, adequate fluid intake, sitz baths, topical analgesics
2. Topical therapy (e.g., glyceryl trinitrate [GTN] ointment, calcium channel blockers such as nifedipine and diltiazem)
3. Locally injected botulin toxin
4. Lateral internal sphincterotomy (LIS)
5. Isosorbide dinitrate (ISDN), pharmacological sphincter relaxants, manual anal dilation, muscarinic agonists, adrenergic agonists and antagonists were considered but not recommended

MAJOR OUTCOMES CONSIDERED

- Differential diagnosis of acute versus chronic fissures
- Symptom relief
- Healing rates
- Recurrence rates
- Postoperative incontinence rates
- Incidence of underlying pathology such as Crohn´s disease, HIV/AIDS, tuberculosis, syphilis, or anal carcinoma in patients with anal fissures

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A MEDLINE search of the English language literature (1980-1999) was performed using the medical subject terms anal fissure cross-referenced with etiology,

treatment, and surgery. From the reviewed literature, articles of particular importance published in earlier years were also identified.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Subjective Review

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This paper was approved by the American Gastroenterological Association (AGA) Clinical Practice Committee on May 19, 2002 and by the AGA Governing Board on July 27, 2002.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnosis

The diagnosis of fissure is confirmed on physical examination. A fissure is a split in the squamous epithelium at or just inside the anal verge. Given this location, fissures are best seen by effacing the anal canal with opposing traction on the buttocks. Associated physical findings include a sentinel skin tag just distal to the fissure and a hypertrophied anal papilla at its proximal margin. Fissures cannot be visualized with end-viewing endoscopes. In the setting of marked pain or tenderness, instrumentation of the anal canal is inappropriate; it is traumatic to the patient and only rarely yields diagnostic information. When significant anal pain cannot be diagnosed comfortably, examination under anesthesia is warranted.

The great majority of anal fissures occur in the midline, usually posteriorly. If they occur off the midline, fissures mandate evaluation for an underlying diagnosis, such as Crohn's disease, HIV/AIDS and associated secondary infections, ulcerative colitis, tuberculosis, syphilis, leukemia, or cancer. Signs of chronicity include the sentinel tag, hypertrophied papilla, fibrosis, and visualization of bare internal sphincter muscle at the fissure base.

Treatment Options

About half of all fissures heal with conservative care, which consists of fiber supplementation, adequate fluid intake, sitz baths, and topical analgesics. Acute fissures are more likely to heal than chronic ones. In most cases, an initial trial of conservative care alone is appropriate, particularly for acute fissures. The timing and choice of additional treatment depend on the chronicity of the fissure, the severity of its symptoms, and the rate and completeness of its response to conservative care. The following 3 options are acceptable:

1. Surgery

   Most surgeons now favor lateral internal sphincterotomy (LIS) as the procedure of choice for anal fissures that do not resolve with conservative care or that are simply too painful for conservative care. In a minority of patients, LIS is associated with minor, but sometimes permanent, defects in continence. Despite this drawback, the operation can be recommended for its technical simplicity, minimal morbidity, and ability to rapidly ameliorate symptoms, high cure rates, and low relapse rates.

2. Topical Therapy

   Topical therapy is directed at reversibly decreasing resting anal pressure, with a goal of allowing fissure healing without permanent sphincter damage. Several preparations have been tested, especially nitroglycerin ointment (glyceryl trinitrate [GTN]). Early enthusiastic trials (healing rates of 70% to 80%) have been tempered by more recent studies showing lower (25% to

50%) healing rates. Side effects, particularly headache, have been reported in a variable number of patients, but they only infrequently require cessation of therapy. Topical calcium channel blockers appear to be as effective as topical GTN, but have fewer associated side effects. Long-term failure rates with topical therapy may be significant and require further study. NOTE: According to the guideline developer, currently neither appropriate diluted GTN nor topical calcium channel blocker preparations are commercially available in the United States.

3. Botulin Toxin

   A relatively small number of studies have shown high cure (75% to 95%) and low morbidity rates with locally injected botulin toxin (BT). The optimal location of injection (internal vs. external sphincter) remains controversial. Long-term studies of relapse rates and careful evaluation of BT´s effect on continence, particularly in comparison to sphincterotomy, are needed.

Choice of Treatment

There is no proven optimal treatment for anal fissure; each of the 3 options discussed has its own unique merits and disadvantages. Standard conservative care is risk-free, but has a relatively low success rate and takes a long time. In contrast, LIS carries a risk of permanent minor sphincter impairment, but works rapidly and effectively. Until recently, the algorithm for fissure treatment was simple: choose standard conservative care for patients with acute fissures, tolerable levels of pain, or compromised sphincter function; choose LIS if pain levels mandate immediate action or if conservative care fails.

Topical therapy and BT injection both represent efforts to achieve prompt but temporary sphincter relaxation, combining the safety of nonoperative treatment with the high cure rate and rapid effect of LIS. Promising results have been published, but a number of uncertainties remain. For topical therapy, these uncertainties include: Why the broad range of reported success rates, and what type of success can the practicing clinician expect? What is the best topical agent? What are the long-term relapse rates? For BT: Where exactly should it be injected? Will careful questioning of treated patients uncover subtle alterations in continence similar to those detected after LIS? Will there be relapses over the long term? Most importantly, will the striking results of BT injection hold up, as more centers report on larger series of patients?

Presently, topical therapy and BT injection should be considered acceptable options, even if not entirely proven, for the treatment of anal fissure. Their low morbidity profiles allow them to be used as first-line treatment, not merely as salvage treatment for failed conservative care. However, further experience will be necessary to determine their definitive role in the algorithm of fissure therapy.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis and treatment of acute and chronic anal fissures

POTENTIAL HARMS

Side effects of treatment of anal fissures including incontinence (related to surgical interventions) and headaches (related to the use of topical therapies such as nitroglycerin ointment).

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

The anal fissure literature is replete with retrospective case series; until recently, few randomized controlled studies were reported. Given these constraints, it was necessary to accept imperfectly designed or imperfectly conducted studies as part of the available fund of knowledge.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: Diagnosis and care of patients with anal fissure. Gastroenterology 2003 Jan;124(1):233-4. [1 reference] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 Jan

GUIDELINE DEVELOPER(S)

American Gastroenterological Association - Medical Specialty Society

SOURCE(S) OF FUNDING

American Gastroenterological Association

GUIDELINE COMMITTEE

American Gastroenterological Association Patient Care Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, the Clinical Practice Committee meets 3 times a year to review all American Gastroenterological Association guidelines. This review includes new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Gastroenterological Association (AGA) Gastroenterology journal Web site.

Print copies: Available from the American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Madoff RD, Fleshman JW. AGA technical review on the diagnosis and care of patients with anal fissure. Gastroenterology 2003 Jan;124(1):235-45.

Electronic copies: Available from the American Gastroenterological Association (AGA) Gastroenterology journal Web site.

Print copies: Available from the American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on August 20, 2003.

COPYRIGHT STATEMENT

Date Modified: 11/15/2004